REMARKS

Claims 15-21 have been canceled without prejudice to presenting them in a subsequent divisional or continuation application.

The claims have been amended to more clearly present them in better form for appeal if necessary.

The Examiner has repeated his rejection of the claims over Sarin and DiGioia, but admits that Sarin does not teach defining orientation with respect to a plane by using a fluoroscopic image. Indeed, Sarin is explicit as to how he determines the pelvic plane: he uses a "touch plate" 250 (Fig. 4) and an optical tracker:

> FIG. 6 shows more detailed steps for acquiring the pelvic plane using the touch plate and an (optical) locating assembly. First, in step 600 a geometric relationship is predefined between the touch points and the ASIS and pubic locators. Note that the support system maintains the relative orientation of the touch plate vis a vis the pelvic locators, notwithstanding any adjustment of the locators. Thus, *the three touchpoints of the touchplate define a coordinate system; the ASIS locators and the pubic locator define a plane (the APP); the orientation of the APP is defined in the touchplate coordinate system, reduced to a digitized mathematical set of parameters (modeled) and stored in a digital computer for later reference*. Suitably, the orientation of the APP can be represented by a vector normal to the APP, or as two orthogonal vectors lying in the APP. The predetermined, stored relationship is relative. (Sarin, ¶ [0049], emphasis added).

What does this have to do with:

> receiving a single fluoroscopic image of a pelvis in the near AP direction;
> defining landmarks of the pelvis on the image;
> determining the axial or transaxial displacement of the landmarks on the image;
> calculating the axial or transaxial rotations of the pelvis based on the displacements

As claimed by applicant? Respectfully, nothing.

Similarly, DiGioia uses a tracked device ("sensing device 300"), not an image, to determine the orientation of body structure with respect to a coordinate frame:

> As illustrated in FIG. 3A, the coordinates of the points on the bony surface can be found using a sensing device 300 such as, for example, a pointing probe, an ultrasound probe, a fluoroscopic imaging device, an optical range sensor, or a mechanical arm. The sensing device 300 is used to measure the positions of discrete points on the bony surface relative to the sensing device 300. *The position of the sensing device 300 is tracked using the tracking device 30.* Thus, the position of the discrete points on the bony surface can be expressed relative to the tracking device 30, and then registered with the pre-operative plan. The position of a surgical tool 302 can also be tracked intra-operatively by the tracking device 30. (DiGioia, col. 8, l. 59-col. 9, l.4, emphasis added).

We believe that the claims as previously presented made these distinctions clear. However, to further the point, we have added the limitation "without using a patient tracker" to the claims. Additionally, we have added new claims 22-27 addressed to determining both axial and transaxial rotations as part of the one method.

We believe that the claims as now presented are clearly patentable and we respectfully request that a Notice of Allowance be issued.

REMARKS

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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